CLAIMS

I claim:

1. A disk enclosure comprising:

a first controller powered by a first voltage circuit and coupled to a first bus;

a second controller powered by a second voltage circuit and coupled to a second bus; and

a first switch coupled between the first bus and the second bus, the first switch operable to de-couple the first and the second buses when the voltage output from the second voltage circuit falls below a predetermined threshold.

2. The method of claim 1, wherein the first bus is coupled to a first plurality of elements.

3. The disk enclosure of claim 2, wherein the first plurality of elements includes at least one of a temperature sensor, a memory, and a backplane controller.

4. The disk enclosure of claim 3, wherein the backplane controller is coupled to a port bypass circuit, the port bypass circuit operable to bypass a disk drive.

5. The disk enclosure of claim 2, wherein:

the first controller is coupled to a third bus;

the second controller is coupled to a fourth bus;

a second switch coupled between the third and the fourth buses, the second switch operable to de-couple the third and the fourth buses when the

voltage output from the first voltage circuit falls below a predetermined threshold.

6. The method of claim 5, wherein the fourth bus is coupled to a second plurality of elements.

7. The disk enclosure of claim 6, wherein the second plurality of elements includes at least one of a temperature sensor, a memory, and a backplane controller.

8. The disk enclosure of claim 7, wherein the backplane controller is coupled to a port bypass circuit, the port bypass circuit operable to bypass a disk drive.

9. The disk enclosure of claim 6, wherein:

the first controller is coupled to a fifth bus;

the second controller is further coupled to a sixth bus;

a third switch coupled between the fifth bus and a seventh bus, the third switch operable to de-couple the fifth and the seventh buses when the voltage output from the first voltage circuit falls below a predetermined threshold; and

a fourth switch coupled between the sixth bus and the seventh bus, the fourth switch operable to de-couple the sixth and seventh buses when the voltage output from the second voltage circuit falls below a predetermined threshold.

10. The disk enclosure of claim 9, wherein the seventh bus is further coupled to a third plurality of elements.

11. The disk enclosure of claim 10, wherein the third plurality of elements includes at least one of a temperature sensor, a memory, a backplane controller, and an I/O expander.

12. The disk enclosure of claim 11, wherein the I/O expander is coupled to at least one battery.

13. The disk enclosure of claim 11, wherein the I/O expander is coupled to at least one power supply.

14. A disk enclosure comprising:

a first controller powered by a first voltage circuit and coupled to a first bus;

a second controller powered by a second voltage circuit and coupled to a second bus;

a first switch coupled between the first bus and a third bus, the first switch operable to de-couple the first and the third buses when the voltage output from the first voltage circuit falls below a predetermined threshold; and

a second switch coupled between the second bus and the third bus, the second switch operable to de-couple the second and the third buses when the voltage output from the first voltage circuit falls below a predetermined threshold.

15. The disk enclosure of Claim 14, wherein the third bus is coupled to a first plurality of elements.

16. The disk enclosure of claim 15, wherein the first plurality of elements includes at least one of a temperature sensor, a memory, a backplane controller, and an I/O expander.

17. The disk enclosure of claim 16, wherein the I/O expander is coupled to at least one battery.

18. The disk enclosure of claim 16, wherein the I/O expander is coupled to at least one power supply.

19. The disk enclosure of claim 15, wherein:

the first controller is coupled to a fourth bus;

the second controller is coupled to a fifth bus; and

a third switch coupled between the fourth and the fifth buses, the third switch operable to de-couple the fourth and the fifth buses when the voltage output from the second voltage circuit falls below a predetermined threshold.

20. The disk enclosure of claim 19, wherein the fourth bus is coupled to a second plurality of elements.

21. The disk enclosure of claim 20, wherein the second plurality of elements includes at least one of a temperature sensor, a memory, and a backplane controller.

22. The disk enclosure of claim 21, wherein the backplane controller is coupled to a port bypass circuit, the port bypass circuit operable to bypass a disk drive.

23. The disk enclosure of claim 20, wherein:

the first controller is coupled to a sixth bus;

the second controller is coupled to a seventh bus; and

a third switch coupled between the sixth and the seventh buses, the third switch operable to de-couple the sixth and seventh buses when the voltage output from the first voltage circuit falls below a predetermined threshold.

24. The disk enclosure of claim 23, wherein the seventh bus is coupled to a third plurality of elements.

25. The disk enclosure of claim 24, wherein the third plurality of elements includes at least one of a temperature sensor, a memory, and a backplane controller.

26. The disk enclosure of claim 25, wherein the backplane controller is coupled to a port bypass circuit, the port bypass circuit operable to bypass a disk drive.